PAN CORNWALL PAIN CAFE

23rd Feb

11.00

- Have you got a coffee or tea
- Favourite cake

- Who and where we are?
- What are we hoping for?

MENU

- Who we are
- Our Café
- The brain and pain
- Our experience and stories
- What next

CAFÉ CONVERSATIONS WITH PURPOSE

- We believe that quality conversations can heal or bridge some of the divisions formed in the world and we can get better at them
- not just any conversation – conversations about the big issues that affect many different people, which don't always have neat solutions.
- Conversations with purpose – know they are important but immediate outcomes are unclear or incremental (as opposed to outcome conversations
- *"I need you to improve performance" "I want to manage my pain"*
- *"I want to do more " "I worry about talking about my health"*
- Engagement involves balancing 'risk and motivation'

DEVELOPING WELLBEING CONVERSATIONS

- Learning through social interaction
- Learning through conversation
- Learning though understanding and empathy

... learning" has lost its central meaning in contemporary organizations. Little wonder for, in everyday use, learning has come to be synonymous with "taking in information." Yet, taking in information is only distantly related to real learning. Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves.

(Senge 1990)

imagine.if

PAIN CAFES ATMOSPHERE

Easy to talk
Everybody involved
Everyone has something to offer
Engaging and meaningful
Encouraging
Enlightening
Educational

MAKING AND CHANGING CONNECTIONS

- We all make connections – it is how our brain works to make meaning
- We make connections (synapses) between neurons and these links help understand world
- More we develop a connection *(synapse) stronger it gets (like a muscle)
- Messages I am not good – years of developing muscle
- Can change connections – synapse pruning and create new ones
- As a result of this session your brain will have changed

C n yo rea th s?

- Can you read this?

- Do ou l ke to ead?

- Do you like to read?

- re y u rea ing t is?

- Are you dreaming this?

Stroop Effect

YELLOW BLUE ORANGE

BLACK RED GREEN

PURPLE YELLOW RED

ORANGE GREEN BLUE

BLUE RED PURPLE

YELLOW RED GREEN


POWER OF PLASTICITY

PHANTOMS IN THE BRAIN

Dan

- healthy and active– wakes with agonising backpain in mid 20s that lasts for 20 years
- doctors and therapy but nothing works - MRI scan reveals no physical damage
- pain reprocessing therapy – brain trained to unlearn pain and real pain experience vanishes

Dianne

- Crippling stomach pain from age 7 (diarrhea/sickness/eating disorder - IBS
- behaviour therapy programme and learns about connection between brain and bowel and role stress plays in symptoms
- rethink pain replacing negative with positive mindset - significantly reducing IBS

MYTH:
PAIN = DAMAGE

- injury with no pain
- pain with no injury
- pain without a body part

Experience of pain not about tissue damage but a complex interaction with brain and nervous system

Fire alarm - doesn't sense fire but heat or smoke

No pain pathway in brain

The brain processes

_____

Environment - sights, sounds, temp

Senses - Pressure, touch, chemicals, temperature, stretch

Beliefs - health and body

Memory - been here before

Mood - stress (level hormones in blood

Question – Do I need to protect myself and if there is a threat pain alarm is signaled

Pain is created by brain and projected onto the body

TALKING PAIN

slipped - rupture - degenerate – twisted – broken – bruised

- Language is often **frightening** and creates fear and misunderstanding

Fears and beliefs play a role in **experience** of pain

Misunderstanding creates burden on lives - we don't trust body and that we can cope leading to stop doing things we love or are really important

Individual and social

Lower back and neck pain large cause of absenteeism – UK spends 2- 3% GDP on managing and treatment every year – more expensive that diabetes and cancer combined

ARE WE SAYING PAIN IS THE HEAD

Not some people but all people - 100% output of brain and not input from body

But because it is not associated with tissue damage does not make it less real

Sound is still same – regardless of what drives it and is equally real and valid

CHALLENGE TO PAIN IS DAMAGE

- We are fundamentally strong living tissues remarkable strong
- Don't fear movement – motion is lotion - bending is not bad, stiffening spine is unnatural - strong evidence for staying active and keeping mobile for all pain - faster recovery
- You are getting better – body is healing and repairing (inside as well as paper cuts)

-VE 2 +VE

I am cold – I need to get myself warmer

I am fat – I could be thinner

He takes ages – he could be quicker

Develop our own…

FLIP IT: WHY VERSUS HOW

Why often associated with negative

- Why me? why now?
- Why should I?
- Why does this always happen to me?
- Why today of all days?

- How did I end up here?
- How can I quickly get to be where I need to be?
- How can I stay calm?

Spiral out and not in

REFERENCES

- Pain and the brain Julia Glover Ted Talk
- Curable
- “Phantoms in the brain’’ is back pain a transmissible disease BBC Radio 4
- Live Well With Pain 10 Footsteps

CHRONIC PAIN: A CYCLE OF STRESS AND PAIN

NEUROSCIENCE EXPLAINS HOW STRESS CAN FUEL PERSISTENT PAIN

curable

STRESSES

Past injuries, accidents or health conditions

Relationships (family, romantic)

Work

Anxiety

Sadness or Grief

Anger

Childhood adversity

Unresolved painful memories

PTSD

Social isolation or rejection

Discrimination

and many more

STRESSES (FROM PAIN)

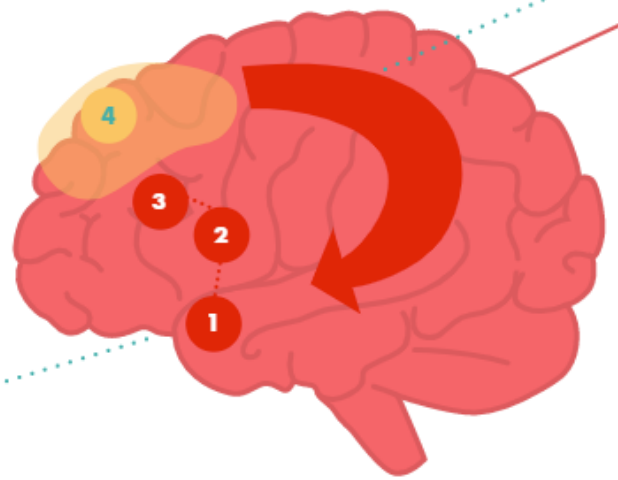
Sensitized nervous system

Fear, worry & anticipation of pain

Associating the pain with some catastrophic health issue

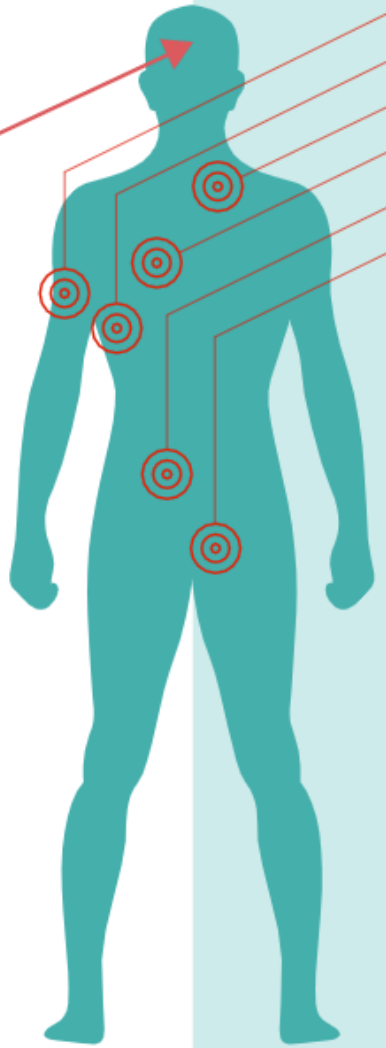
WHAT THE BRAIN TELLS THE BODY TO DO WHEN IT'S STRESSED

Blood flow shifts from the frontal lobes (conscious way of thinking) into the limbic system (emotional, reacting, "fight or flight" part of the brain – the **amygdala** & **ANS**)



HOW STRESSES ARE PROCESSED AND STORED IN THE "PAIN PARTS" OF THE BRAIN

1. **AMYGDALA** Sends signals to activate the ANS; activating fight or flight signals
2. **ANS (Autonomic Nervous System)** Can cause acute spasms and other physiological changes anywhere in the body
3. **ACC (Anterior Cingulate Cortex)** Emotional factors light up this area; when activated, DLPFC turns off
4. **DLPFC (Dorsolateral Prefrontal Cortex)** An area of the brain that helps to decrease pain



WHAT'S AFFECTED?

- Muscles
- Blood flow
- Nervous system
- Heart
- Gastrointestinal system
- Genito-urinary system

YOU MAY FEEL:

- Pain almost anywhere in the body
- Tingling
- Numbness
- Burning
- IBS & bladder symptoms
- Palpitations
- Rapid heart rate
- Headaches & migraines

THE NERVOUS SYSTEM CAN "LEARN" TO FEEL THESE SENSATIONS

As this cycle repeats, the brain and central nervous system can become wired to make the body feel continuous pain... often times even in the absence of structural or tissue damage

PAIN & LEARNING BY THE NERVOUS SYSTEM RETURN AS STRESSES